

## **Title: Further Exploring Students' Connection between Effort and Performance: What's Personality Got to do with it?**

### **Purpose:**

The goal of this study was to further explore the relationship between effort, performance, and personality in an attempt to promote effective pedagogy, contributing to the potential for increased progression and retention rates.

### **Theoretical Framework:**

The current study continues to rely on Uri Treisman's work that began with a mathematics laboratory at the University of California at Berkeley during the 1990s. The goal for Treisman's approach was to increase student success in math courses and contribute to the retention rate for his institution. Treisman did not just collect research data; he used the data to transform the educational practices first at his own institution and then to institutions and disciplines across the nation. He has been called a "translation researcher" who works to study the lives of students and apply data-driven student-based research to pedagogical approaches in any discipline. Ultimately, Treisman emphasizes that people must connect hard work to success and retention. Repeatedly, Treisman (2013, 2001, 1992) found that in his research, students do not connect hard work with success; instead, students report that natural abilities are a better predictor of success in a course.

In addition to Treisman's work, the study expanded to focus on elements of personality, in particular Duckworth, Peterson, Matthews and Kelly's (2007) concept of grit, as defined as "perseverance and passion for long-term goals." Other personality variables, as measured by the Big Five Personality Inventory (OCEAN = Openness to experience, Conscientiousness, Extroversion, Agreeableness, and Neuroticism), were consulted as well (Gosling, S. D., Rentfrow, P. J., & Swann, 2003).

### **Methods:**

The revised study used a mixed-method approach that combined quantitative and qualitative research methods. This year's group includes one hundred students enrolled at a small Southeastern college that were recruited for the study. Eighty-one students were enrolled in Introductory Psychology (PSYC 1101) and nineteen students were enrolled in First-Year Writing (ENGL 1101) during the Fall 2014 semester. The primary method of data collection was survey instrument with Likert-type items with 1 representing "Strongly Agree" and 5 representing "Strongly Disagree." Some of the questions focused on students' perceptions of the connection between effort and performance: for example, "Your grade in this course will be a direct result of the effort you put into the course." Various personality measures were included. Three qualitative items were intermingled with the quantitative questions. These qualitative questions measured students' understandings of "effort" in an educational setting and identified their perceptions concerning confidence in their abilities in the classroom: for example, "Why do you expect to earn this grade in this course?"

### **Results:**

Results are in line with Treisman's findings that students are failing to connect hard work with success. Several of the quantitative items indicated significant differences among various groups which will be discussed in the presentation. The qualitative portions of the study indicate that

students know what they are supposed to be doing in terms of studying; however, they do not understand how to go about studying. Personality measures are expected to shed further light on the disconnect.

### **Audience, Implications, & Recommendations:**

- **Administrators concerned about progression and retention.** If students believe that a natural skill ability is all that is needed for success, they may not be studying enough or at all. Outreach to students can be more effective if administrators and study-session leaders first understand students' connections between effort and performance. If faculty and administration can strengthen study skills, students may experience more success. Successful students contribute to higher retention rates.
- Furthermore, if grit and other personality differences suggest a pathway to success, perhaps we can find ways to tailor orientation and college-success programs to identify and work with the strengths of those personality differences.
- **Faculty.** This presentation will include specific pedagogical suggestions for faculty, regardless of the discipline.
- **Tutoring Programs/Supplemental Instructors.** Because this study highlights the perceived connections (or lack thereof) between effort, performance, and personality, the conclusions may help tutors and supplemental instructors plan workshops on effective study skills.
- Highlight a mixed-methods, interdisciplinary research process. We plan to share our survey instrument and discuss how this approach can be used at other institutions.
- Results will be used to increase the effectiveness of study-skill programs on our campus, and these programs can be remixed for use at other campuses. Administrators will hear from the students about their connections between effort and performance. This viewpoint may assist in developing campus-wide initiatives that are focused specifically on the students' perceptions of effort and performance.
- Results will be shared with faculty to assist in their classroom-based preparations for tests/assessments.
- Future research should be expanded to include other disciplines on our campus, such as Biology or Nursing. In particular, the researchers suggest studying classes that have a high D/F/W rate to determine if studying the perception between effort and performance in those classes could impact student success.
- Grit may be linked to college completion.

### **References**

- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*: 92.6, 1087-1101.
- Gee, J. P. (2011). *How to do Discourse Analysis*. New York: Routledge.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. Jr. (2003) A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*: 37, 504-528.

- Grbich, C. (2012). *Qualitative Data Analysis*. London: SAGE.
- Rose, M. (2009). *Why School?: Reclaiming Education for All of Us*. New York: The New Press.
- Hodges, R., Simpson, M. L., & Stahl, N. A. (2012). *Teaching Study Strategies in Developmental Education*. New York: Bedford.
- Sommers, N. (2013). *Responding to Student Writers*. New York: Bedford.
- Schendel, E., & Macauley, W. J. (2012). *Building Writing Center Assessments that Matter*. Logan, UT: Utah State UP.
- Treisman, P. U. (2013, January). *Keynote Presentation*. Paper presented at the Spring 2013 Launch Week, College of Coastal Georgia.
- Treisman, P. U., & Surles, S. (2001). "Systemic reform and minority student high achievement." In *The Right Thing to Do, the Smart Thing to Do: Enhancing Diversity in the Health Professions in Honor of Herbert W. Nickens, M.D.* (pp. 260-280). Washington, DC: Institute of Medicine, National Academy Press, National Academy of Sciences.
- Treisman, P. U. (1992). "Studying students studying Calculus: A look at the lives of minority mathematics students in college." *College Math Journal*: 23.5, 362-373.